

### Abstract

Circuitry using infra-red (IR) diodes in remote control units. In one embodiment an IR LED is used both as a transmitter diode and also as a receiver diode responsive to light to thereby develop photocurrents and/or voltages for use by external circuitry. In a second embodiment an improved amplifier circuit is provided for an IR LED and IR photo detector diode which is 10 mounted behind, and receives light through, the transmitter IR LED.